THE S. W. SHATTUCK CHEMICAL COMPANY, INC., HAER No. CO-71-D
BUILDING NO. 5
(Calcium-Sodium Molybdate
Processing Building)
1805 South Bannock Street
Denver
Denver County
Colorado

HAER
COLO
16-DENV
65D-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Rocky Mountain Regional Office
P.O. Box 25287
Denver, Colorado 80225

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Part I. Introduction

Location:	Building No. 5 (Calcium-Sodium Molybdate Processing) of the S. W. Shattuck Chemical Company, Inc. is located at 1805 South Bannock Street in the City and County of Denver, Colorado (Shattuck site). The Shattuck site is located approximately 4 miles south of Denver's downtown area near the intersection of Evans Avenue and Broadway.
Quadrangle:	U. S. Geological Survey, Englewood 7.5-minute topographic quadrangle, dated 1965, photorevised 1980.
Date of Construction:	Building No. 5 was constructed in 1957.
Present Owner:	The S. W. Shattuck Chemical Company, Inc. 1805 South Bannock Street Denver, Colorado 80223
Present Use:	Mineral processing operations at the Shattuck site ceased in April of 1984 due to poor economic conditions associated with molybdenum and rhenium metals. The site is currently undergoing environmental remediation in accordance with the terms of a Superfund Record of Decision issued by the U. S. Environmental Protection Agency ("EPA") on January 28, 1992.
Significance:	The significance of the Shattuck site arises from its role in processing various metals since 1918. At various periods of time, molybdenum compounds, radium, uranium compounds, and rhenium were produced at the site. From about 1934 to the early 1940's, Shattuck was one of only two companies in the U. S. that produced radium salts; although, collectively both companies produced only a small percentage of the radium used in the U. S. during that period.

Prepared By:

Historic Narrative: Steven F. Mehls, Project Historian, Western Historical Studies, Inc. June 1993

Architectural and Historical Engineering Processes Information: Nanon A. Anderson, AIA, Andrews & Anderson, July and October 1992.

Photography: Arnold Thallheimer, April and May 1992

Building No. 5

Divided into two sections, Building No. 5 housed the production of sodium molybdate in the north section (See Photograph, HAER No. CO-71-D-3) and calcium molybdate in the south section (See Photograph, HAER No. CO-71-D-1). Molybdic oxide was delivered from the roasters in Building No. 6 to be mixed in an aqueous phase with sodium hydroxide and sodium carbonate. When boiled in an evaporator, the chemicals crystallized into sodium molybdate. In the 1960s and 1970s, Shattuck shipped approximately one-half million pounds of sodium molybdate a year. The Na_2MoO_4 was used for corrosion inhibiting applications in cooling towers, in anti-freeze solutions, and as seed treatment in agriculture.

In the south end of Building No. 5, molybdic oxide was mixed with lime and filtered. The resultant precipitant from this aqueous solution was calcium molybdate, a chemical used in white inhibitive pigments for paints[1] (See Photograph, HAER No. CO-71-D-1).

General Description

Built in 1957, this metal-clad "Butler"-type building, 50' x 100' is 1 1/2 stories. Its moderately sloped gable end roof is oriented on the north-south axis. Located on the north end of the west side is a metal storage shed added to the building in 1970 (See Photographs, HAER No. CO-71-B-1 through 6).

Roof

The roof is a steel frame supporting standing seam metal roofing (See Photograph, HAER No. CO-71-D-2 and 4).

Windows

Six-over-three awnings fenestrate the top of the walls. Flush fiberglass panels act as skylights (See Photographs, HAER No. CO-71-D-1, 2, 4 and 5).

Doors

Two 12' x 13' two-section, metal-panel sliding doors access the south and west sides. A metal man door accesses the east side (See Photographs, HAER No. CO-71-D-1, 2 and 5).

Foundation

The foundation consists of a concrete slab floor with a perimeter concrete foundation.

Interior Features

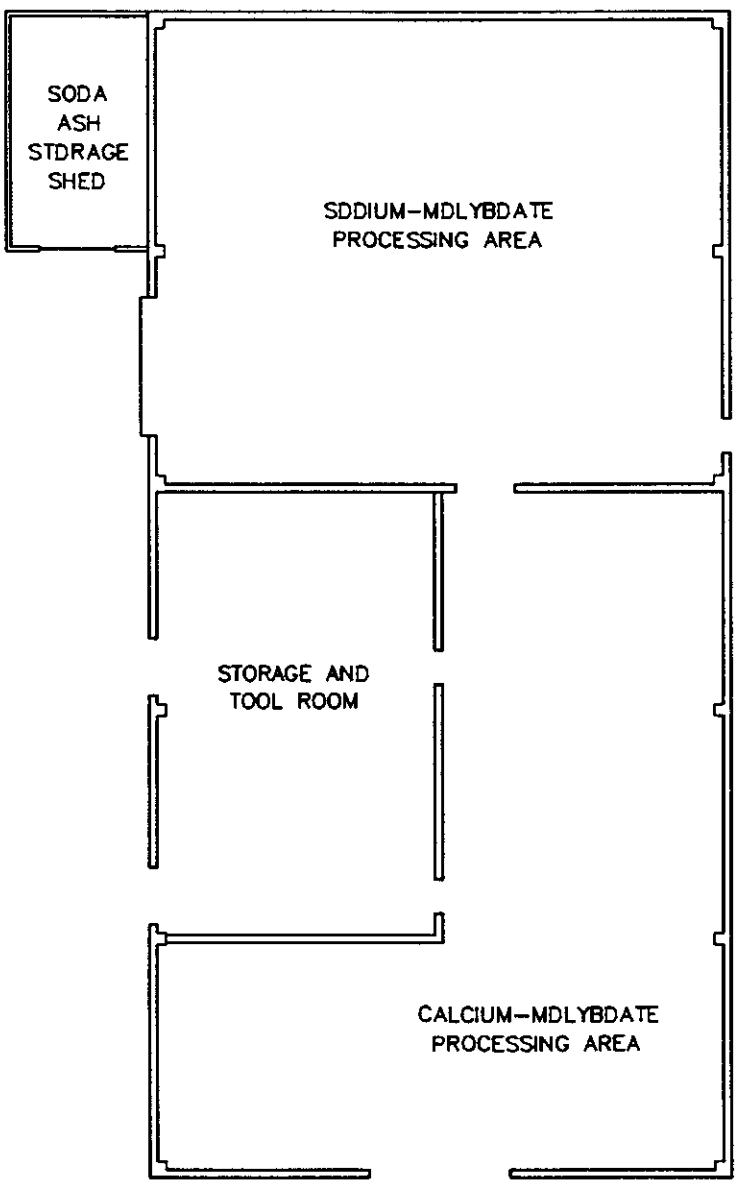
The northern portion of the building is one open room partitioned off from the south portion with a steel-frame, metal-clad wall. Concrete-block-partitioned storage and tool rooms claim one-third of the south portion. The balance of the south end is open space. All equipment has been removed from both ends of the building and the building is currently being used for equipment, and tool and parts storage.

Exterior Features

The metal storage shed on the northwest corner of the building is accessed through a pair of 4-foot-by-9-foot outswinging wooden doors on the shed's south side.

Endnote

1. Personal Communication, June 29, 1992, Mr. Henry F. Barry, Vice President - Technology, The S. W. Shattuck Chemical Company, Inc. with Nanon Adair Anderson, Historic Architect.



SCALE 1/16" = 1'-0"

NORTH

0 5 10 20 30 50 75 FEET

0 1 2 3 4 5 10 15 20 METERS